CLAIMS

1. Lock, especially for vehicle doors, hatches, or the like,

-- with a rotary latch (20), into which a closing part (13) travels when the door is closed, thus pivoting the rotary latch (20) from an open position via a prelatching position into a main latching position;

-- with a catch (30), which, when in the prelatching position, engages in a prelatching stop notch (25) provided on the rotary latch (20) and, when in the main latching position, engages in a main stop notch (26) located on the rotary latch (20); and

-- with a motorized opening aid for the door, comprising a drive unit (15), which uses a power takeoff path to rotate the actuating element (40), which acts directly on the catch (30), characterized in that

-- the actuating element (40) has an actuating surface (44), the radial dimension of which increases in the rotational direction (42); and in that

-- the actuating element (40) has, on its actuating surface (44), a blocking surface section (45), which serves to prevent

the actuating element (40) from rotating in the opposite direction, which blocking surface section is gripped by a blocking element (37) of the catch (30) after the catch (30) has been lifted.

2. Lock, especially for motor vehicle doors, hatches, or the like,

-- with a rotary latch (20), into which a closing part (13) travels when the door is closed, thus pivoting the rotary latch (20) from an open position via a prelatching position into a main latching position;

-- with a catch (30), which, when in the prelatching position, engages in a prelatching stop notch (25) provided on the rotary latch (20) and, when in the main latching position, engages in a main stop notch (26) located on the rotary latch (20); and

-- with a motorized opening aid for the door, comprising a drive unit (15), which uses a power takeoff path which acts directly on the catch (30),

-- and comprising a load lever (50), which prevents the catch (30) from dropping back into the rotary latch (20) after the catch (30) has been lifted,

characterized in that

-- a pivoting moment in the pivoting direction (57) is exerted on the load lever (50) by the rotary latch (20) as the latch moves in the opening direction (22), by means of which moment the load lever (50) is pivoted into a position beyond its rest position on the catch (30), i.e., a position a certain distance away from the catch (30), in which position the catch (30) is free to pivot along its path (19).

3. Lock according to Claim 1 or Claim 2, characterized in that the closing part (13) which releases the rotary latch (20) triggers a drive start signal for the drive unit (15), as a result of which the actuating element (40) is caused to move in rotational direction (42).

4. Lock according to one of Claims 1-3, characterized in that the drive energy of the drive unit (15) can be transmitted via a pinion (16) to a gear wheel (43), the gear wheel (43) being in working connection with the actuating element (40).

5. Lock according to one of Claims 1-4, characterized in that the gear wheel (43) and the actuating element (40) have the same axis of rotation (41), and in that the gear wheel (43) and the actuating element (40) are connected to each other for

rotation in common, preferably constituting a single component.

6. Lock according to one of Claims 1-5, characterized in that the actuating element (40) functioning as an opening aid moves in rotational direction (42), and in that the rotary latch (20) moves in the opposite rotational direction (22) during the opening process.

7. Lock according to one of Claims 1-6, characterized in that the actuating element (40) functioning as an opening aid runs up against an actuating arm (38) of the catch (30) and lifts the catch (30) out of the main latching position or out of the prelatching position on the rotary latch (20) in opposition to a restoring force (F2).

8. Lock according to one of Claims 1-7, characterized in that, after the catch (30) has been lifted out of the main latching position or out of the prelatching position on the rotary latch (20), it is brought by the actuating element (40) into an overstroke position, as a result of which the hook (34) on the latch (30) is held a certain distance (h) away from the circumference of the rotary latch (20).

9. Lock according to one of Claims 1-8, characterized in that the actuating surface (44) of the actuating element (40),

the radial dimension of which surface increases in the rotational direction (42), is at its maximum distance from the axis of rotation (41) at radius (R1), as a result of which the catch (30) is in its overstroke position and thus at its maximum distance (h) from the rotary latch (20), and in that, upon the further movement of the actuating element (40) in rotational direction (42), the radius (R2) of the actuating surface (44) remains unchanged.

10. Lock according to one of Claims 1-9, characterized in that the blocking element (37) is located at the end of the adjusting arm (38) of the catch (30), and in that, after the catch (30) has been raised, the blocking surface section (45) of the actuating element (40) comes to rest against this blocking element when the actuating element tries to rotate in the direction opposite the rotational direction (42).

11. Lock according to one of Claims 1-10, characterized in that the blocking surface section (45) which has run up against the blocking element (37) triggers a drive stop signal and/or a signal for restoring the gearbox to the home position.

12. Lock according to one of Claims 1-11, characterized in that the catch (39) has another arm (35) with a thrust surface

(36) at the end, which actuates a signal switch (17) only when the catch (30) is located in the main stop notch (26) on the rotary latch (20).

13. Lock according to one of Claims 1-12, characterized in that a spring loading (F2) causes the hook (34) of the catch (30) to drop into the main stop notch (26) or into the pre-stop notch (25) of the rotary latch.

14. Lock according to one of Claims 1-13, characterized in that -- after the catch (30) has been raised -- the rotary latch (20) is guided automatically by the spring loading (F1) acting on it out of its prelatching position or out of its main latching position into its open position.

15. Lock according to one of Claims 2-14, characterized in that, to prevent the catch (30) from dropping back into the rotary latch (20), a spring-loaded (F4) projection (54) of the load lever (50) blocks the outward-pivoted adjusting arm (38) of the catch (30) and thus prevents the catch (30) from pivoting along its path (19).

16. Lock according to one of Claims 2-15, characterized in that the load lever (50) can be moved around a pivot axis (51).

17. Lock according to one of Claims 2-16, characterized in that the pivot axis (51) of the load lever (50) is a certain distance away from the axis of rotation (41) of the actuating element (40), where the pivot pin of the actuating element (40) representing the axis of rotation (41) engages in a recess (56) in the load lever (50), where the recess (56) preferably has a longitudinal dimension aligned with the pivoting movement (57).

18. Lock according to one of Claims 2-17, characterized in that the pivoting moment which moves the load lever (50) out of the rest position is produced by a shoulder (27) on the rotary latch (20), which in this case pushes a circumferential section (55) of the load lever (50) in the pivoting direction (57).

19. Lock according to one of Claims 2-18, characterized in that, when the load lever (50) is releasing the catch (30), it is moving in the pivoting direction (57), whereas the rotary latch (20) is moving in the opposite rotational direction (22).